

LISTING OF THE CLAIMS

This listing of claims is provided for the Examiner's convenience. No claims have been amended, added, or cancelled.

Listing of Claims:

1. (Original) A hybrid digital broadcasting receiver for reproducing digital multimedia data, comprising:

a broadcast receiving module comprising:

a receiving section for receiving and demodulating a digital broadcasting data stream which includes a multiplexed and transmitted plurality of compressively encoded and scrambled programs;

a first demultiplexer for demultiplexing said demodulated digital broadcasting data stream, and selecting and extracting digital broadcasting data corresponding to a program selected by a user;

a conditional access section for detecting conditional access information and decrypting said selected digital broadcasting data using said detected information; and

a decoder module comprising:

a second demultiplexer for demultiplexing a digital multimedia data stream which includes a multiplexed plurality of compressively encoded digital multimedia data; and

a decoding section for decoding digital broadcasting data output from said broadcast receiving module and digital multimedia data output from said second demultiplexer.

2. (Original) The hybrid digital broadcasting receiver according to claim 1, further comprising a smart card for receiving said conditional access information and generating a scrambling key.

3. (Original) The hybrid digital broadcasting receiver according to claim 1, wherein said conditional access information comprises program management information and subscriber management information.

4. (Original) The hybrid digital broadcasting receiver according to claim 2, wherein said conditional access section receives said scrambling key from said smart card and decrypts said digital broadcasting data.

5. (Original) The hybrid digital broadcasting receiver according to claim 1, further comprising a multimedia module for supplying said digital multimedia data stream to said second demultiplexer.

6. (Original) The hybrid digital broadcasting receiver according to claim 1, wherein said digital multimedia data comprises audio data and video data.

7. (Original) The hybrid digital broadcasting receiver according to claim 6, wherein said second demultiplexer separates said audio data and said video data from said digital multimedia data stream.

8. (Original) The hybrid digital broadcasting receiver according to claim 1, wherein said broadcast receiving module and said decoder module are each formed in a single integrated circuit.

9. (Original) A hybrid digital broadcasting receiver for reproducing digital multimedia data, comprising:

a receiving section for receiving a digital broadcasting data stream which includes multiplexed and transmitted digital broadcasting data packets and conditional access information packets for a plurality of programs;

a first demultiplexer for separating said conditional access information packets and digital broadcasting data packets for a program selected by a user from said received digital broadcasting data stream;

a conditional access section for detecting conditional access information from said conditional access information packets and decrypting said separated digital broadcasting data packets using said conditional access information;

a second demultiplexer for receiving a digital multimedia data stream which includes multiplexed compressively encoded audio packets and video packets, and separating said audio packets and said video packets from said digital multimedia data stream; and

a decoding section for decoding digital broadcasting data packets output from said conditional access section and audio packets and video packets output from said second demultiplexer.

10. (Original) The hybrid digital broadcasting receiver according to claim 9, further comprising a smart card for receiving said conditional access information and generating a scrambling key.

11. (Original) The hybrid digital broadcasting receiver according to claim 9, wherein said conditional access information comprises program management information and subscriber management information.

12. (Original) The hybrid digital broadcasting receiver according to claim 10, wherein said conditional access section receives said scrambling key from said smart card and decrypts said digital broadcasting data.

13. (Original) The hybrid digital broadcasting receiver according to claim 9, further comprising a multimedia module for supplying said digital multimedia data stream to said second demultiplexer.

14. (Original) The hybrid digital broadcasting receiver according to claim 9, wherein said receiving section, first demultiplexer and conditional access section are formed in a first integrated circuit chip while said second demultiplexer and decoding section are formed in a second integrated circuit chip.

15. (Original) A device for processing digital broadcasting data, comprising:
a receiving section for receiving and demodulating a digital broadcasting data stream which includes multiplexed and transferred digital broadcasting data packets and conditional access information packets for a plurality of programs;
an error correcting section for correcting any error in said demodulated digital broadcasting data stream;
a demultiplexer for separating said conditional access information packets and digital broadcasting data packets for a program selected by a user from said demodulated digital broadcasting data stream; and
a conditional access section for detecting conditional access information from said conditional access information packets and decrypting said separated digital broadcasting data packets using said conditional access information.

16. (Original) The device according to claim 15, wherein said conditional access information comprises program management information and subscriber management information.

17. (Original) The device according to claim 15, further comprising a smart card interface for outputting said conditional access information to a smart card and receiving a scrambling key generated by said smart card.

18. (Original) The device according to claim 17, wherein said conditional access section receives said scrambling key from said smart card and decrypts said digital broadcasting data.

19. (Original) The device according to claim 15, further comprising a decoder module interface for supplying said decrypted digital broadcasting data to said decoder module.

20. (Original) The device according to claim 15, wherein said device is formed in a single integrated circuit chip.

21. (Original) A method for providing digital multimedia services in a hybrid digital broadcasting receiver which includes a broadcast receiving module for processing digital broadcasting data and a decoder module for processing compressively encoded digital data, said method comprising the steps of:

receiving a digital broadcasting data stream which includes a multiplexed and transferred plurality of scrambled programs and conditional access information at a broadcast receiving module;

separating said conditional access information and digital broadcasting data for a program selected by a user from said digital broadcasting data stream received at said broadcast receiving module and decrypting said separated digital broadcasting data using said conditional access information;

decoding the digital broadcasting data input from the broadcast receiving module at a decoder module;

receiving a digital multimedia data stream which includes multiplexed compressively encoded audio data and video data at said decoder module; and

demultiplexing said digital multimedia data stream at said decoder module to separate said audio data and said video data and decoding said separated audio data and video data.

22. (Original) The method according to claim 21, further comprising the steps of:

determining whether there is a request for receiving digital broadcasting from said user; and

driving said broadcast receiving module and receiving said digital broadcasting data stream when said request is received.

23. (Original) The method according to claim 21, wherein said conditional access information comprises program management information and subscriber management information.

24. (Original) The method according to claim 21, further comprising the steps of:

supplying said conditional access information to a smart card from said broadcast receiving module;

generating a scrambling key at said smart card using said conditional access information; and

supplying said scrambling key generated by said smart card to said broadcast receiving module to decrypt said separated digital broadcasting data.